

HIGH SPEED IDENTIFICATION DEPENDABLE IDENTIFICATION

MULTIPLE READERS IN CLOSE PROXIMITY

EASY AND QUICK INSTALLATION

LOW ENVIRONMENTAL INTERFERENCE

INTERFACES: WIEGAND 26bits, ISO2 (Clock & Data) RS232, RS422/485

LPR 3011-RS V2

Compact Reader - 2.45 GHz

Nominal Range* : 2m

Antenna Pattern: 90°x 90°

I - INTRODUCTION

Balogh HyperX[™] LPR 3011 RS V2 compact reader enable high speed identification of all tags in the HyperX[™] product range. The reader is available in 1 version with a fully integrated compact design.

The compact casing contains all the functional parts of the reading unit: antenna, RF source, demodulator, processor, and interface modules. The electronics are totally integrated into robust ABS casing and coated with a special resin.

The reader can be mounted against poles, walls or metallic surfaces using the optionnal support that is to be adjusted to direct the identification field toward the direction of the tags.

The LPR 3011 RS V2 model is designed for outdoor installation. Each reader has a bicolor LED to inform tag holders of identification.

II - OPERATING PRINCIPLE

Electromagnetic radiation characteristics in the 2.45 GHz frequency band allow high data transmission rates and directional antenna beams. Tag detection is therefore very rapid and relatively insensitive to environmental interference.

The HyperX™ tag is electro-magnetically inactive when outside of the reader's range. It's state-of-the-art feature (registered patent) is its capacity to reflect incident microwaves - a tag receiving a 2.45 GHz carrier will echo this signal, modulated by its individual identification

code, back to the reader. The reader receives and processes this signal, sending the data to a host system via a standard interface.

III - COMMUNICATIONS

This reader can substitute for most of the traditional contact and proximity card reader. Connection is made to the host system via the available standard data links.

Model is available

• RS version: both TTL + Computer Serial Links

ISO2, Wiegand (26 bits) RS232, RS422, RS485

For computer serial links, a complete dialogue can be implemented utilizing the ModBusTM protocol (by interruption from readers or by polling from the host system).

IV - INTERFACES

This reader dispose of:

- 1 optocoupled OUTPUT that commutes when the host system sends $ModBus^{TM}$ commands or automatically for each identification according to set-up .
- 1 optocoupled INPUT (RS model only) that enables validation or interpretation of identifications in real time.

VI -POWER SUPPLY

This reader has an integrated regulator that is powered from 12 to 24VDC.

Connection to the mains is made with an external 4W power supply (not included).

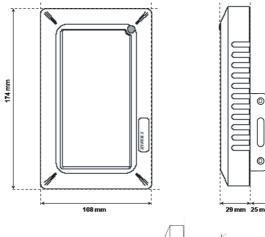


• CHARACTERISTICS**

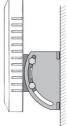
108 x 174 x 29 mm **Dimensions** 0.7 Kg Weight Light Grey Color - 20C° to +50C° Operating temperatures - 40C° to +80C° Storage temperatures I.P. 66 Protection level 95% without condensation Relative humidity 12 to 24 VDC - 4W Power supply 2.45 GHz Frequency band 30000 bauds Data Rate (Between Tag&Reader) 31 Number of reading channels **HDLC** Fault reading protocol **BPSK** Modulation type 1E-7/1E-4* Rate of (Fault reading/Failure reading*) 10mW Radiated power 2_m Nominal reading distances* up to 4m Maximal reading distances up to 4m
Approvals EN 60950, EN 300 489 1&3, ETS 300 440 **Approvals** CF 0536

(*) Normal conditions of use

(**) Specifications do not form part of any contract and may be changed without notice



Installation example using optional mounting bracket



APPLICATIONS



Automatic vehicles identification

- · Vehicles controlled in standard lanes,
- Minimizes traffic congestion and gueuing times
- Ideal suited for commercial and corporate parking areas
- Well design for gated communities, airport, university, and hospitals parkings.

Personnel access control

- Long range identification, comfort of use
- Simultaneous ID of several tag holders,
- Tag identification without handily presentation.

MODELS



• LPR 3011-RS V2 Wiegand26bits, ISO2 RS 232, RS 422, RS 485.

Caution

- Metalic surfaces or persons coming between tags and the reading antennas create shadow zones in the identification area.
- The proximity of a tag and a metallic surface or a person (<5mm) reduces the reading distances.

